APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 11 September 2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District – Haley, Chris, NWS-2008-104-NO
Form 2 of 2 - Wetlands D, E, F, G, H, U, I, J, M, N, R, and S

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:WA County/parish/borough: Whatcom City: Blaine
Center coordinates of site (lat/long in degree decimal format): Lat. 48.8983022642354 **N**, Long. -122.696605928025 **W**.
Universal Transverse Mercator: Zone 10 N E
Name of nearest waterbody: Terrell Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Birch Bay
Name of watershed or Hydrologic Unit Code (HUC): Strait of Georgia, 17110002
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 17 June 2008
☒ Field Determination. Date(s): 24 January 2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.
There are no "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.
There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. Waters of the U.S.
a. Indicate presence of waters of U.S. in review area (check all that apply): [1]
☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

See additional forms for other project wetlands/waters

b. Identify (estimate) size of waters of the U.S. in the review area:
Non-wetland waters: linear feet: width (ft) or acres.
Wetlands: 0.78 acres.

c. Limits (boundaries) of jurisdiction based on: **1987 Delineation Manual**
Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):[3]
☒ **Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain**: There are no surface water connections between Wetlands D, E, F, G, H, U, I, J, M, N, R, or S and other waters of the U. S. These wetlands are surrounded by identified upland soils and are situated far enough away from other waters to preclude calling them "adjacent." These wetlands are not used for interstate commerce including recreational activities, commercial fishing activities, or used for industrial purposes. See attached additional information.

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

C. SIGNIFICANT NEXUS DETERMINATION

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[4]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: 0.78 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: project drawings, wetland delineation, and mitigation plan.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.

[4] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: 7.5min, Blaine Quad.
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☒ State/Local wetland inventory map(s):WA Dept. of Ecology, 2001.
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):WA Dept of Ecology, 2005,
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

NWS-2008-104-NO, Haley, Chris
Site Visit Date: 24 January 2008, Noon – 14:30
Weather – Clear, sunny, very cold – surface of ground and standing water frozen

Randel Perry (Corps)
Katrina Jackson (consultants)
Chris Haley (applicant)

Site Description: The 20-acre subject site is located in the Birch Bay/Terrell Creek watershed in Whatcom County and is rectangular in shape, ranging east-west. Topography in general slopes from east to west with a mid-property topographical break running east-west across the site; the southern half drains toward the southwest while the northern half drains west-northwest. The site is bounded by undeveloped properties to the north and south, residential properties to the east, and farmland to the west. The immediate vicinity around the site is moderately developed for residential and agricultural uses. The site is comprised of open grassy fields at the west end, a centrally located scrub-shrub and forested section, and a single-family residence with outbuildings on the east end. Western fields are currently maintained for forage and are regularly mowed. There is one non-wetland surface water feature associated with the site; a pond (old stock pond) located in the central portion of the property. Site has been significantly manipulated in the past via agricultural use and logging. There is an off-site stream and pond system to the northwest of the subject property. The perennial stream and pond system flows across the neighboring property to the west and conveys water downstream to Terrell Creek.

Delineation: A wetland delineation was conducted by Northwest Consulting, LLC in November of 2007 and revised on 28 January 2008. 22 wetlands were identified by the consultants.

Soils: Mapped soils are – Whatcom LaBounty silt loam 0% - 8% slopes (non-hydric w/ hydric inclusions)
Whatcom silt loam 3% - 8% (non-hydric w/ hydric inclusions)
Observed soil colors are:
Wetlands –10YR 3/1 silt loam overlying 10YR 3/2 with mottles.
Uplands – 10YR 3/3 and 7.5YR 3/3 silt loam (no mottles).

Vegetation:

Wetland Meadow	Agrostis spp., FAC Reed canary grass (*Phalaris arundinacea*), FACW Soft rush (*Juncus effuses*),FACW Tall buttercup (*Ranunculus acris*) FACW
Wetland Forest	Red alder (Alnus rubra) FAC Creeping buttercup (Ranunculus repens) FACW Velvet grass (*Holcus lanatus*) FAC
Upland Meadow	Orchard grass (*Dactylis glomerata*), FACU Canada thistle (*Cirsium arvense*), FAC Tall fescue (*Festuca arundinacea*), FACU- Rough bentgrass (*Agrostis scabra*), FAC Annual bluegrass (*Poa annua*), FAC-

Upland	Stinging nettle (*Urtica dioica*) FAC+
Forest	Himalayan blackberry (*Rubus discolor*) FACU
	Red alder (*Alnus rubra*) FAC
	Big leaf maple (*Acer macrophyllum*), FACU
	Thimbleberry (*Rubus parviflorus*) FACU+
	Sword fern (*Polystichum munitum*) FACU
	Piggyback plant (Tolmiea menziesii) FAC

Wetland acreage identified: 2.46 acres
Wetland acreage to be filled: Unknown

Observations/Discussion: A site visit was conducted by Corps staff (R. Perry) on 24 January 2008. Corps personnel walked around the perimeter of all wetlands as identified by the consultants at the time of the visit with the exception of wetlands O, P, and Q. Most wetland boundaries were easily identified by sharp breaks in topography and noticeable transitions in vegetation communities.

The consultant was asked to re-evaluate the southern boundary of Wetland R and to survey the drainage path between Wetlands I and H; it appears that the path contains additional wetland areas. On 28 January 2008, the consultant provided additional information. The area along the southern edge of Wetland R had no hydrophytic vegetation and soil colors were 10YR 3/2 with no mottles. Inundation noted at the time of the site visit appears to be ponding on top of soils compacted from equipment tracks. No change was made to the boundary of Wetland R. An additional area of wetland (labeled "U") was identified between Wetlands I and H and added to the delineation map.

Hydrology for site wetlands is primarily derived from rainfall with inputs to Wetland T coming from offsite ditches. Excavations during past logging operations may have created seeps in the deepest portions of the wetlands (D, I, J, and M) that have since formed.

Water drains from Wetland K into the on-site pond; there is no apparent outlet from the pond. An old road bed separates the lower end of the pond area from the off-site stream/pond system to the north. No culverts or other conveyance was noted under or over the roadbed. Water from the pond may overflow and drain north into the off-site pond during severe rain events. Levels in pond would need to be raised by 2-3 feet above observed levels before this would happen. Wetland K is situated upslope and within 75 feet of the offsite waters.

Water from Wetland L appears to flow north-northwest via overland sheet flow from the lowest part of the wetland, across the remnant old road bed, and into the forested area offsite. No surface water feature was found connecting this potential sheetflow to the offsite pong/drainage to the northwest, however, Wetland L is situated upslope and within 200 feet of the offsite waters.

Wetlands M, N, J, I, D, and E have developed in depressions on the landscape likely created during logging operations. Wetland boundaries are sharply defined by topography and upland soils/vegetation. These wetlands feature straight, linear boundaries on at least 2 sides, indicating they formed in excavations (e.g. yarding pits) left over from logging equipment operations. There are no surface water outlets for wetlands M, N, D, and E and no surface connection to other waters of the U. S.

Wetlands J and I drain via surface flow that is part channelized and part sheet flow south along the remnant of an access road and into Wetlands U, then H, then G, and finally into Wetland F. Wetlands U, H, G, and F appear to have formed adjacent to the old road footprint along the southern property line and may have formed via impoundment by the road fill. Water in the downstream end of Wetland F dissipates into a forested area approximately 0.10 miles from, and approximetly 40 feet above, the nearest downslope stream (Terrell Creek to the southwest). There is no apparent surface water outlet for wetland F and no surface connection to other waters of the U. S.

Wetlands A and C have formed in depressions in the low end of the western field. Wetland B appears to have formed in a low spot of the old road prism along the north end of the property. Observed wetland boundaries are defined by upland soils and transitional herbaceous communities. These wetlands are situated upslope from and within 150 feet of the off-site stream/pond system and likely drain to the system via sheet flow.

Wetlands S and R appear to have formed in depressions east of the residential yard and were created by past equipment operations. Applicant states that both areas were borrow sites for topsoil for the house's yard. There appears to be no drainage

out of these areas and standing water was observed in wetland R. Both wetlands slope to the west and terminate at the edge of the residential yard. No feature was found on the west boundary of the yard indicating the continuation of a historic drainage.

Wetland T appears to have formed adjacent to an old road footprint along the north property line and may have formed via impoundment by the road fill. Water enters the property and Wetland T in the northeast corner from drainage ditches on adjoining properties, and then flows west along the path of an old road and eventually north into an upland forested area. No inspection was made of the forested area between the subject property and the pond/drainage to the northwest of Wetland T, however, Wetland T is situated upslope and within 200 feet of the offsite waters (drainage leading into offsite pond).

No determinations are being made for wetlands O, P, and Q. These wetlands are slated to be preserved via conservation easement.

Applicant proposes fill of wetlands R, S, and E for short plat (3 lot) development. In considering development of the site, the Corps recommended utilizing the footprint of old road on the northern edge for accessing the proposed western field house sites and avoidance of forested wetlands. Mitigation opportunities are possible on site; the Corps recommended establishment and enhancement on property along the southern and central portions of the site.

Jurisdictional determination: There were no observed surface water connections between Wetlands A, B, C, K, L or T and other waters of the U. S. These wetlands drain offsite to the northwest; no information is available on potential offsite connections to other waters. However, these wetlands are upslope and within close enough proximity to the offsite RPW to be considered hydrologically connected. The offsite RPW, which flows into Terrell Creek, a tributary of Birch Bay, a tidal waterbody used for interstate and foreign commerce. Wetlands A, B, C, K, L and T have a significant nexus to downstream traditional navigable waters of the U. S. and are jurisdictional waters of the U. S.

There are no apparent surface water connections between Wetlands D, E, F, G, H, U, I, J, M, N, R, or S and other waters of the U. S. These wetlands are surrounded by identified upland soils and are situated far enough away from other waters (0.10 mile) to preclude calling them “adjacent” or assuming hydrological connections. These wetlands are not used for interstate commerce including recreational activities, commercial fishing activities, or used for industrial purposes. Wetlands D, E, F, G, H, U, I, J, M, N, R, and S are not jurisdictional waters of the U. S.